Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Office of Secretary Of Defense

**R-1 ITEM NOMENCLATURE** 

0400: Research, Development, Test & Evaluation, Defense-Wide

APPROPRIATION/BUDGET ACTIVITY

PE 0603851D8Z: Environmental Security Technology Certification Program

**DATE:** February 2012

BA 4: Advanced Component Development & Prototypes (ACD&P)

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	39.628	62.007	75.941	-	75.941	72.637	63.447	63.358	64.160	Continuing	Continuing
P514: Environmental Security Technology Certification Program	39.628	62.007	75.941	-	75.941	72.637	63.447	63.358	64.160	Continuing	Continuing

### A. Mission Description and Budget Item Justification

(U) ESTCP demonstrates and validates the most promising innovative environmental and energy technologies that target DoD's most urgent needs. Technologies selected are projected to provide a return on the investment through cost savings and improved efficiencies. The program responds to: (1) Congressional concern over the slow pace of remediation of environmentally polluted sites on military installations, (2) Congressional direction to conduct demonstrations specifically focused on emerging new technologies, and (3) the need to improve defense readiness by reducing the drain on the Department's operation and maintenance dollars caused by environmental restoration, waste management, and the cost of energy. Preference for demonstrations is given to technologies that have successfully completed all necessary research and development objectives, and address the highest priority DoD requirements.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	<b>FY 2013 Base</b>	FY 2013 OCO	FY 2013 Total
Previous President's Budget	30.419	63.606	39.703	-	39.703
Current President's Budget	39.628	62.007	75.941	-	75.941
Total Adjustments	9.209	-1.599	36.238	-	36.238
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
Congressional Adds	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	10.000	-			
SBIR/STTR Transfer	-0.519	-			
Other Program Adjustments	-	-1.599	36.238	-	36.238
Defense Efficiency - Baseline Review     Adjustments	-0.272	-	-	-	-

## **Change Summary Explanation**

For FY 2013, \$32.238 M was added for the Energy Test Bed and \$4M for UXO Live Site Discrimination Demonstration.

**UNCLASSIFIED** 

Exhibit R-2A, RDT&E Project Just		<b>DATE</b> : February 2012										
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)					OMENCLAT 1D8Z: Enviro Certification	nmental Se	PROJECT P514: Environmental Security Technology Certification Program					
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
P514: Environmental Security Technology Certification Program	39.628	62.007	75.941	-	75.941	72.637	63.447	63.358	64.160	Continuing	Continuing	
Quantity of RDT&E Articles												

### A. Mission Description and Budget Item Justification

B. Accomplishments/Planned Programs (\$ in Millions)

(U) ESTCP demonstrates and validates the most promising innovative environmental and energy technologies that target DoD's most urgent needs. Technologies selected are projected to provide a return on the investment through cost savings and improved efficiencies. The program responds to: (1) Congressional concern over the slow pace of remediation of environmentally polluted sites on military installations, (2) Congressional direction to conduct demonstrations specifically focused on emerging new technologies, and (3) the need to improve defense readiness by reducing the drain on the Department's operation and maintenance dollars caused by environmental restoration, waste management, and the cost of energy. Preference for demonstrations is given to technologies that have successfully completed all necessary research and development objectives, and address the highest priority DoD requirements.

	20	20.2	1 1 2010
Title: Environmental Technology Demonstration/Validation	39.628	32.007	43.941
<b>Description:</b> Funds are programmed for investments in projects that address priority DoD environmental requirements. The focus of the program is on live site UXO discrimination demonstrations, addressing emerging and recalcitrant cleanup issues, range sustainment technologies, and reducing life cycle costs of DoD weapon systems by eliminating hazardous materials. Accomplishments/plans are described for each FY below.			
FY 2011 Accomplishments: In FY 2011 projects were funded to address priority DoD environmental requirements. Focused new investment topics for FY 2011 included: 1) Remediation of Contaminated Groundwater; 2) In Situ Management of Contaminated Sediments; 3) Characterization, Control, and Treatment of Range Contamination; and 4) Military Munitions Detection, Discrimination, and Remediation. Details are provided at www.serdp-estcp.org			
FY 2012 Plans: Funds are planned for continued investment in projects that address priority DoD environmental requirements. Focused new investment topics for FY 2012 include: 1) Long Term Management of Contaminated Groundwater; 2) Bioavailability Technologies and Tools; 3) UXO Live Site Demonstrations; and 4) Natural Resource Management. Increased funding in FY 2012 is to support new live site UXO demonstrations. This effort will transition innovative technologies that can reduce DoD's military munitions response liabilities by approximately 75% with an expected cost savings of \$10 billion. Details are provided at www.serdpestcp.org.			
FY 2013 Plans:			

FY 2011

FY 2012

FY 2013

Exhibit N-2A, ND I GE I Toject dustilication: I B 2010 Office of Occident	cially of Deletise		DAIL: 10	bruary 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603851D8Z: Environmental Security Technology Certification Program		=	Security Techi	nology	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 20				
Funds are planned for continued investment in projects that address p	priority DoD environmental requirements.					
Title: Energy Technology Demonstration/Validation			-	30.000	32.000	
<b>Description:</b> Funds are programmed for investments in projects that to increase energy efficiency, reduce installation energy intensity, increacurity. Emerging energy technologies offer DoD a cost effective op consumption and improved energy security on its installations while re-	rease the use of renewable energy, and improve portunity to meet these requirements for reduced	energy				
FY 2012 Plans: Funds are planned to initiate investments in energy projects that consprogram will validate and test the operational cost and performance or building environment so as to reduce risk, overcome the barriers to de DoD test bed program exploits the Department's existing built infrastrutechnologies in three areas: component technologies (i.e., HVAC, light to building energy design, control, and management; and installation-test bed designed to evaluate energy technologies under the varied of	f innovative energy technologies in a real-world in eployment, and facilitate wide-scale deployment. ucture to test energy efficiency and renewable enting, distributed energy generation); system approlevel smart micro-grid technologies. It is a distrib	ntegrated The ergy oaches uted				

#### FY 2013 Plans:

Funds are planned to continue investments in energy projects initiated in FY2012 that constitute the Installation Energy Test Bed Initiative.

test beds key elements are: 1) competitive selection of new technologies, 2) systematic and consistent evaluation to determine performance, operational readiness and life cycle costs, and 3) development of guidance and design information for future deployment across installations. This process has been developed, piloted, and validated through previous Congressional

funding. Information on existing demonstrations can be found at WWW.SERDP-ESTCP.ORG.

Accomplishments/Planned Programs Subtotals 39.628 62.007 75.941

**DATE:** February 2012

## C. Other Program Funding Summary (\$ in Millions)

N/A

### **D. Acquisition Strategy**

ESTCP solicits proposals from all DoD organizations, other Federal Agencies, and the commercial sector. Projects are selected based on an annual competitive process through reviews by multi-agency panels.

Exhibit R-2A, RDT&E Project Justification: PB 2013 Office of Secretary Of Defense

Exhibit R-2A, RDT&E Project Justification: PB 2013 Office of Secretary Of Defense  DATE: February 2012									
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603851D8Z: Environmental Security Technology Certification Program	PROJECT P514: Environmental Security Technology Certification Program							
	Technology Certification Program  evel, each individual project is measured agains	Certification Program  et technical and financial milestones on a quarterly							

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Office of Secretary 0	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603851D8Z: Environmental Security Technology Certification Program	PROJECT P514: Envii Certification	ronmental Security Technology n Program

		FY 2011		Y 2011 FY 2012 FY					FY 2	013		FY 2014				FY 2015			;	FY 2016				FY 2017				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
FY11 In Progress Reviews				İ							,						,											
Develop FY12 Program																												
FY12 In Progress Reviews																												
Develop FY13 Program																												
FY13 In Progress Reviews																												

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Office of Secretary Of Defense

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P) PE 0603851D8Z: Environmental Security Technology Certification Program

P514: Environmental Security Technology

Certification Program

### Schedule Details

	St	art	Е	nd
Events	Quarter	Year	Quarter	Year
FY11 In Progress Reviews	2	2011	3	2011
Develop FY12 Program	2	2011	4	2011
FY12 In Progress Reviews	2	2012	3	2012
Develop FY13 Program	2	2012	4	2012
FY13 In Progress Reviews	2	2013	3	2013